

ABSTRACT

Durable non-electrically conductive metal treatments (such as coatings or finishes) for yarns and textile fabrics. Such treatments preferably comprise silver and/or silver ions; however, other metals, such as zinc, iron, copper, nickel, cobalt, aluminum, gold, manganese, magnesium, and the like, may also be present or alternatively utilized. Such a treatment provides, as one example, an antimicrobial fiber and/or textile fabric which remains on the surface and does not permit electrical conductivity over the surface. The treatment is extremely durable on such substrates; after a substantial number of standard launderings and dryings, the treatment does not wear away in any appreciable amount and thus the substrate retains its antimicrobial activity (or other property). The method of adherence to the target yarn and/or fabric may be performed any number of ways, most preferably through the utilization of a binder system or through a transfer method from a donor fabric to a target textile fabric in the presence of moisture and upon exposure to heat. The particular methods of adherence, as well as the treated textile fabrics and individual fibers are also encompassed within this invention.